

Information about

Kidney (Renal) Biopsy



Introduction

This leaflet tells you about having a kidney biopsy. Please read it as well as talking to your doctor or nurse.

What is a kidney biopsy?

A kidney or renal biopsy means removing a very small sample (about half a matchstick in size) from one of your kidneys using a special needle. We can then test the sample under a microscope to find out the cause of your kidney disease.

Why would you need to have a kidney biopsy?

You will know that blood or urine tests have shown that your kidneys are not working properly. A biopsy may find the cause of the kidney disease and tell us what the best treatment is.

Where is it done?

We usually carry out the biopsy in the ward, in a special procedure room, or you will go to the X-ray department. It takes about thirty minutes and you will usually have a local anaesthetic which numbs the area and you will be awake. You can eat and drink normally before and after the biopsy is done.

How is it done?

We will usually ask you to lie face down on the bed or couch with a pillow under your stomach. We will use an ultrasound machine to find the exact position of your kidney. We will clean the skin on your back over the kidney with antiseptic and inject local anaesthetic into the skin. It may sting at first and once the skin is numb we will inject more local anaesthetic around the kidney. The doctor will then pass the biopsy needle through the numb area and take the kidney sample. We will ask you to hold your breath for a few seconds as the kidney moves during breathing. You should usually not be aware of any pain from the biopsy needle but you may feel a little pressure and hear a clicking sound when the doctor takes the biopsy sample. The doctor may ask to take two or three biopsy samples. Occasionally it will not be possible to remove a suitable bit of the kidney.

What happens afterwards?

Afterwards you will rest in a bed for at least six hours. Nursing staff will monitor your pulse and blood pressure and when you pass urine they will test it for blood. During this time you can eat normally and we will usually encourage you to drink plenty of fluids.

When the local anaesthetic wears off you may feel some pain in the back due to slight bruising. We will give you a mild painkiller.

If you feel well after the biopsy and have no pain or bleeding you may be able to go home later that day or the following day to rest.

Do not drive on the day of your procedure, please ask someone to collect you if possible.

After the biopsy you should avoid exercise for 48 hours and if you develop severe pain around the kidney or any blood in the urine you should contact the kidney unit straight away.

Results

A provisional result of the biopsy should be available within 24-48 hours but the full report may take longer.

What are the risks of a kidney biopsy?

The risk of serious complications are small. Your doctor has recommended a kidney biopsy because it is felt that the information from the biopsy makes this small risk worthwhile and it is important that you agree about this.

The main risk is that the biopsy needle can damage the kidney or other parts of the body nearby.

Bleeding is the most serious complication. You will have a blood test before the biopsy to make sure your blood clots normally. It is important you tell your doctor if you have any problem with bleeding or bruising or if you are taking tablets that can effect bleeding such as Clopidogrel, Warfarin, Dipyridamole, Apixiban, Riveroxiban, Dabigatran, Edoxaban or similar. You may need to stop these several days before the procedure.

You should also tell your doctor if you are allergic to antiseptic such as **iodine**.

In about 1 in 10 biopsies there is visible bleeding in the urine that settles by itself. In fewer than 1 in 50 biopsies there is more bleeding that requires a blood transfusion. In fewer than 1 in 200 biopsies the bleeding may continue and require urgent x-ray tests or even an operation to stop the bleeding. In fewer than 1 in 2000 biopsies the kidney may have to be removed to stop the bleeding. Although deaths have occurred following complications of biopsies this is extremely rare.

What are the benefits of having a kidney biopsy?

A biopsy could help to find out what is wrong with your kidneys and help decide the correct treatment. It may avoid you being given unnecessary treatment which could have side effects and it may prevent further harm being done to your kidneys by being given the wrong treatment.

What are the alternatives to a kidney biopsy?

A biopsy is usually the last test to be done to work out what is wrong with your kidneys because the other tests have not provided the answer. Without a biopsy your doctor may not be able to advise the best treatment for you. Your doctor should be able to tell you what changes in treatment could be made for your kidneys if you decide not to have a biopsy taken first. If you agree to have the biopsy we will ask you to sign the hospital's consent form which will state that you have received information about the procedure and have discussed it with your doctor.

If you have any further questions or develop any complications, please contact:

The Renal assessment Unit, Queen Elizabeth University Hospital

- Day ward number: ☎ 0141 452 3760 or 3761 (Monday to Friday)
- Renal assessment doctor: ☎ 0141 452 3763 (out of hours)
- Renal Ward 4D: ☎ 0141 452 2421 (Saturday and Sunday)

This information sheet has been adapted from the Renal Association's information about kidney (renal biopsy).6.09.12